

Docket No. 13382-US-PA
US App. No. 10/810,090

REMARKS

Status of the Application

Claims 1-18 were previously pending.

Claims 1-5 and 18 were rejected under 35 USC 103(a) as being unpatentable over Kobayashi et al. (US 6,741,223) in view of Miyauchi et al. (US 5,371,510).

Claims 6 and 7 were rejected under 35 USC 103(a) as being unpatentable over Kobayashi et al. in view of Miyauchi et al. as applied to claim 3, and further in view of Menig et al. (US 6,289,332).

Claim 8 was rejected under 35 USC 103(a) as being unpatentable over Kobayashi et al. in view of Miyauchi et al. as applied to claim 3, and further in view of Breed et al. (US 5,845,000).

Claims 9 and 10 were rejected under 35 USC 103(a) as being unpatentable over Kobayashi et al. in view of Miyauchi et al. as applied to claim 1, and further in view of Okuyama et al. (US 5,677,701).

Claims 13-17 were rejected under 35 USC 103(a) as being unpatentable over Kobayashi et al. in view of Miyauchi et al. as applied to claim 1, and further in view of Parker et al. (US 6,886,956).

Claim 11 is allowed.

Claim 12 was objected to for being dependent on a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim.

Applicant has amended claims 1-7 and 13-15, canceled claims 9-10, 12, and 16-17, and added new claim 19. The above amendments are fully supported by the specification, such as paragraphs [0042], [0060] to [0066]. No new matter adds through the amendments. For the reasons discussed below, withdrawal of the rejections is requested.

Claim Rejections- 35 U.S.C. 103(a)

Claims 1-5 and 18 were rejected under 35 USC 103(a) as being unpatentable over Kobayashi et al. (US 6,741,223) in view of Miyauchi et al. (US 5,371,510).

Applicant respectfully traverses the rejections for reasons discussed below. Nevertheless,

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Applicant has amended claim 1 to further define the invention. The amended claim 1 reads as:

1. An information displaying apparatus for a vehicle, comprising:
 - a cluster disposed to face an occupant;
 - a display device disposed in said cluster;
 - a display controlling portion configured to control said display device, said display device including a displaying surface which displays vehicle information; and
 - a plurality of reflecting mirror members which are disposed in said cluster and are disposed to have a distance from each other, said vehicle information being reflected by the plurality of reflecting mirror members to be visible by the occupant, *the plurality of reflecting mirror members including at least a first reflecting mirror member which is provided far from the occupant, a second reflecting mirror member which is provided nearer to the occupant than the first reflecting mirror member, and a third reflecting mirror member which is provided nearer to the occupant than the second reflecting mirror member, and the vehicle information reflected by the first reflecting mirror member being visible by the occupant by being transmitted through the second and third reflecting mirror members;*
 - wherein the vehicle information includes a diagram to call attention of the occupant; and
 - wherein said display controlling portion controls the display device such that the diagram reflected by the first reflecting mirror member is sequentially changed to the diagram reflected by the second and third reflecting mirror members as a warning display when there is a necessity of calling the occupant's attention.*

Neither Kobayashi nor Miyauchi teaches or suggests the above emphasized features of claim 1.

According to the present invention as defined in the amended claim 1, the diagram reflected by the first reflecting mirror member is sequentially changed to the diagram reflected by the second and third reflecting mirror members as a warning display when there is a necessity of calling the occupant's attention. Therefore, the diagram for the same vehicle information can be sequentially reflected by the first reflecting mirror member, the second reflecting mirror member, and the third reflecting mirror member, respectively, in case that the occupant's attention needs to be called. See the pictorial diagrams 27a, 27b, and 27c in Fig. 9, for example.

According to the above features recited in claim 1, there is advantageous effect in that the displaying continues smoothly when the diagram reflected and displayed on the first reflecting mirror member is changed over to the diagram reflected and displayed on the second reflecting mirror member, and also, the displaying is consecutively and smoothly carried out when the diagram reflected and displayed on the second reflecting mirror member is changed over to the diagram reflected and displayed on the third reflecting mirror member. Accordingly, the

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visibility is fine even more. See paragraph [0066].

Kobayashi does not teach or suggest such features.

Kobayashi teaches a display device including a display unit capable of displaying a three dimensional image by shifting the position of a real image and a virtual image in a front and back direction, and a total control unit for controlling a display content of the display unit. In Kobayashi, a display control unit 32 is provided for controlling the display content displayed by a display unit 12. Col. 8, lines 6-33. But, the display control unit 32 does not control the sequential changes of the diagram from a first reflecting mirror member to a second reflecting mirror member, and to a third reflecting mirror member as a warning display when there is a necessity of calling the occupant's attention as required by the amended claim 1.

As shown in Figs. 13 and 14, Kobayashi does teach three reflecting mirror members 60, 61, and 62. However, among the three reflecting mirror members 60, 61, and 62, reflecting mirror 60 is used for displaying real images including internal information such as a vehicle speed, reflecting mirror 61 is used for displaying virtual images including external information such as a car in front of the vehicle, and reflecting mirror 62 is used for displaying virtual images including secondary information such as the remaining amount of fuel. Col. 16, lines 40-65, and Figs. 13 and 14. Clearly, Kobayashi fails to teach or suggest changing the diagram displaying the same vehicle information from mirror 60 to mirror 61, and to mirror 62 as warning display when the driver's attention is needed.

Miyauchi teaches or suggests the above emphasized features of claim 1 either.

Miyauchi teaches an automotive display apparatus displays synthetically an ordinary information and a warning information by using a half mirror as a close range view and a distant range view. (Abstract) Fig. 4 shows a display under normal condition. When there is a warning information such as an indication of low fuel level, a pictorial symbol c will show as a close view. Col. 4, lines 7-40, Fig. 4, 5a-5c. Clearly, Miyauchi fails to teach or suggest changing the diagram displaying the same vehicle information such as the low fuel level from a first reflecting mirror to a second reflecting mirror, and to a third reflecting mirror as warning display when the driver's attention is needed.

For at least the reasons discussed above, Claim 1 as amended is patentable over Kobayashi and Miyauchi. Claims 2-5 and 18 depend on claim 1 and, therefore, are also patentable over Kobayashi and Miyauchi for at least the same reasons.

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Claims 6 and 7 were rejected under 35 USC 103(a) as being unpatentable over Kobayashi et al. in view of Miyauchi et al. as applied to claim 3, and further in view of Menig et al. (US 6,289,332).

Menig teaches a message system for a vehicle which provides an extendable, prioritized message scheme. As shown in Fig. 9 and described on Col. 12, lines 4-24, Menig teaches that "[a]s the closing time between the truck and the obstacle reaches predetermined values associated with each stage, the message center displays a progressively larger triangle and the words, "DANGER AHEAD". However, Menig cannot cure the above discussed deficiencies of Kobayashi and Miyauchi.

Therefore, the combination of Kobayashi, Miyauchi and Menig cannot render obvious the amended claim 1. Claims 6-7 indirectly depend on claim 1 and, thus, are patentable over Kobayashi, Miyauchi and Menig for at least the same reasons as claim 1.

In addition, claims 6 and 7 contain features that further distinguish over Kobayashi and Menig as discussed in previous response.

Claim 8 was rejected under 35 USC 103(a) as being unpatentable over Kobayashi et al. in view of Miyauchi et al. as applied to claim 3, and further in view of Breed et al. (US 5,845,000).

Breed was cited to teach an eyepoint detecting means for detecting an eyepoint of the occupant. However, Breed clearly cannot cure the deficiencies of Kobayashi and Miyauchi as discussed above in connection with claim 1.

Therefore, the combination of Kobayashi, Miyauchi and Breed cannot render obvious the amended claim 1. Claim 8 indirectly depends on claim 1 and, thus, is patentable over Kobayashi, Miyauchi and Breed for at least the same reasons as claim 1.

Claims 9 and 10 were rejected under 35 USC 103(a) as being unpatentable over Kobayashi et al. in view of Miyauchi et al. as applied to claim 1, and further in view of Okuyama et al. (US 5,677,701).

Applicant has canceled claims 9-10. Therefore, the rejection is now moot.

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Claims 13-17 were rejected under 35 USC 103(a) as being unpatentable over Kobayashi et al. in view of Miyauchi et al. as applied to claim 1, and further in view of Parker et al. (US 6,886,956).

Claims 16-17 have been canceled.

Parker was cited to provide the elements in claims 13-17 that are missing from Kobayashi and Miyauchi. However, Parker clearly cannot cure the deficiencies of Kobayashi and Miyauchi as discussed above in connection with claim 1.

Therefore, the combination of Kobayashi, Miyauchi and Parker cannot render obvious the amended claim 1. Claims 13-15 depend on claim 1 and, thus, are patentable over Kobayashi, Miyauchi and Parker for at least the same reasons as claim 1.

Please note, on page 13, item 29, of the Office Action, reference Okuda '424 was mentioned. However, Okuda '424 is not found in the reference list. Applicant respectfully requests that Okuda '424 be removed as prior art.

Claim 12 was objected to for being dependent on a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim.

Claim 12 has been canceled. Therefore, the objection is moot.

New Claim

New claim 19 has been added which depends on allowed claim 11 and, thus, is also allowable.

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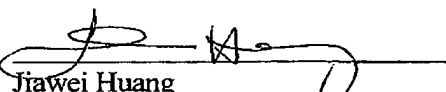
Conclusion

In view of the foregoing amendments and remarks, it is respectfully submitted that all pending claims 1-8, 11, 13-15, 18, and 19 are now in condition for allowance. Allowance of this application is earnestly solicited.

Respectively submitted

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